Discrete Applied Mathematics
Volume 139, Numbers 1–3, 30 April 2004

The 2001 International Workshop on Combinatorial Image Analysis (IWCIA 2001)

Guest Editors:
Sébastien Fourey, Gabor T. Herman, T. Yung Kong, Azriel Rosenfeld

Contents

Contributions

S. Fourey, G.T. Herman, T.Y. Kong and A. Rosenfeld
Preface 1

R. Ayala, E. Domínguez, A.R. Francés and A. Quintero
Digital homotopy with obstacles 5

D. Coeurjolly, Y. Gérard, J.-P. Reveillés and L. Tougne
An elementary algorithm for digital arc segmentation 31

F. Feschet and L. Tougne
An approach for the estimation of the precision of a real object from its digitization 51

S. Fourey, T.Y. Kong and G.T. Herman
Generic axiomatized digital surface-structures 65

E. Garduño and G.T. Herman
Optimization of basis functions for both reconstruction and visualization 95

P. Hong and T.S. Huang
Spatial pattern discovery by learning a probabilistic parametric model from multiple attributed relational graphs 113

A. Kuba, A. Nagy and E. Balogh
Reconstruction of *hv*-convex binary matrices from their absorbed projections 137

CONTENTS Direct

This journal is part of **ContentsDirect,** the ***free*** alerting service which sends table of contents by e-mail for Elsevier books and journals. You can register for **ContentsDirect** online at: **http://contentsdirect.elsevier.com**

doi:10.1016/S0166-218X(04)00105-2

H.Y. Liao and G.T. Herman
Automated estimation of the parameters of Gibbs priors to be used in binary tomography 149

C. Lohou and G. Bertrand
A 3D 12-subiteration thinning algorithm *P*-simple points 171

R. Klette and A. Rosenfeld
Digital straightness—a review 197

J. Šlapal
A digital analogue of the Jordan curve theorem 231

M. Smid, R. Ray, U. Wendt and K. Lange
Computing large planar regions in terrains, with an application to fracture surfaces 253

I. Svalbe
Sampling properties of the discrete radon transform 265

M. Szczepanski, B. Smolka, K.N. Plataniotis and A.N. Venetsanopoulos
On the distance function approach to color image enhancement 283

Author index to volume 139 307